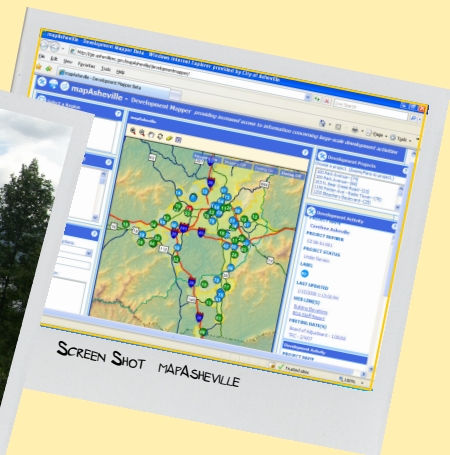Fall 2008, North Fork Reservoir

North Fork, Summer 2006

Screen Shot mapAsheville

Fall 2006, North Fork

INFORMATION TECHNOLOGY SERVICES

2007 Annual Report

IT Services Annual Retreat Fall 2007

Tower @ remote site

@ Municipal Building

CITY OF ASHEVILLE NORTH CAROLINA

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Director's Message

Years ago, while on a business trip, I waited until the night before to use the in-room printer to print my boarding pass from my laptop. To my dismay, I had forgotten my printer cable. I quickly called the front desk staff, who informed me that there was no cable for loan, but I could buy one for $50. I expressed irritation at the lack of a loaner cable, the hotel staff person listened patiently, and then did something that all great customer service folks should do. She asked me why I needed the cable. As an impatient customer, I didn't directly answer. She went one step further in great customer service, and explained that if I wanted a cable so that I could print my boarding pass, she would be delighted to have the concierge print it for me at no charge. By focusing on the real need rather than my stated need, this gem of an employee was able to diffuse my irritation and provide a superior level of customer service without additional cost.

It has been said that IT service organizations fall into three categories: utility providers, business process optimizers, and revenue enablers. And surely, they are right. But in the here and now of Asheville, North Carolina, I feel that talking about these technical roles prior to talking about customer service is putting the cart before the horse. To follow my front desk mentor from so long ago, while we can focus on delivering a cable, it is perhaps better, and less expensive to focus on what the real needs of the customer are. So, while our organization is absolutely committed to keeping our utility computing reliable; and while we are committed to optimizing business process through information technology; and while we are committed to working with the organization to achieve policy-driven revenue goals, I also believe that everything – everything, and I mean everything starts with good customer service.

I am pleased to report to you that, since our beginning as a department three years ago (rather than as a division of Finance), our customer service scores have climbed incredibly (See page 8) and we are grateful to our customers for giving us the opportunity to improve.

And indeed, 2007 was a banner year for us in terms of work accomplishments. I believe that because of our substantial improvement in customer service, the organization entrusted us with more projects and technology initiatives, such as the BTIP (Business Technology Improvement Program) and the award-winning mapAsheville service. As with any good employee, the reward for doing a good job is more requests for service. That's not a bad thing; we are here to serve, after all.

The challenge and the crossroads for our department is now to work with the organization in order to better allocate staff resources to the most appropriate use of those resources. 2008 will find our organization working to establish a project portfolio management process to ensure, given our level of resourcing, that the projects are the projects that will bring the most benefit both to the City organization at large, and to the average citizen. It will not be easy, and I'm sure that we will encounter some measure of irritated internal customers as we journey through this process. But I am also sure that the heightened level of customer service at our IT organization will help us, like that hotel employee, sift through real versus perceived needs – to the benefit of us all.

Thank you for taking the time to review our 2007 accomplishments – we are proud of them, and we look forward to serving you again in 2008.

Sincerely,

Jonathan Feldman, MSM
Director, Information Technology Services
City of Asheville, North Carolina

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Mission

Information Technology Services
strives to provide excellent customer services by providing quality
technical deliverables with a high level of professionalism
and responsiveness.
We adhere to principles of technical and fiscal stewardship with an end
goal of a high quality of life for employees and citizens.

Core Values

Customer Service
We will provide customer service in a responsive and timely manner.
Professionalism
We will interact courteously, ethically, and with commitment to
continuous improvement.
Stewardship
We will earn trust by practicing fiscally responsible management that ensures
system integrity and availability.
Expertise
We will be advocates for our customers by developing and maintaining
competence and knowledge.
Quality of Life
We will recognize the importance of balancing the relationship
between quality of work and quality of life.

Did you know?
For every 1
front line
technician
there are 300
City staff?
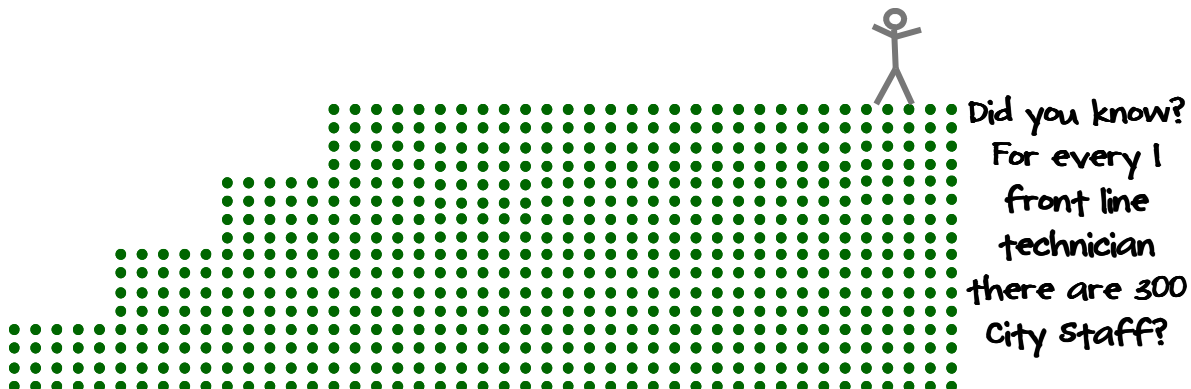
Project Highlights 2007

Code Enforcement Letters

Code enforcement officials identified inaccuracies found in outdated form letters sent to the public regarding development and housing issues. IT Staff was able to work with Planning officials to bring these enforcement letters into compliance with City Ordinances. These letters are a component of the City's enterprise system and they help Code enforcement officials mitigate their workload. ITS further enabled Planning to quickly manage and update these letters within their own department.

Kevin Hymel & Gilbert Domingo

Stormwater Code updates

We continue to support the Stormwater function in HTE that allows the city to bill for Stormwater fees. In calendar year 2007 this function enabled the Stormwater Division to bill $2,563,269.81 in stormwater services.

Assisted with APD Accreditation

ITS Staff completed a yearly security audit for the Asheville Police Department's CALEA certification. This included a review of over 1,000 City employees with access to the network, enterprise system, and CJIS systems. We then compared the data to our active employee list and further investigated security levels of employees.

Flexible Cell Phone Plans

Flexible plans allow Department Directors to choose plans based on operational needs which vary greatly across departments. Rather than force a single contract City-wide, departments have the ability to select their own vendor and service plans which ultimately result in savings to the City.

Rewiring of City Hall

The rewiring of City Hall was a critical infrastructure success in 2007. Rewiring ensures network stability while increasing network performance and speed to both computers and telephones. Rewiring was a necessary step in taking advantage of voice over IP technologies.

City Hall, 2007

Citizen Request Management System

This new system was deployed internally to Human Resources, Public Works, Water, General Admin, and Office of Economic Development. The Citizen Request Management System allows departments to professionally manage citizen requests, as well as serving as an automated follow-up system to take community input and customer service to the next level.

Website Content Management Technology Deployment

IT Services worked with the Public Information Office to deploy the new City website. The new site offers easier navigation for citizens and creates more efficiency for City staff in a consistent, stylized approach. This project was a great example of collaboration between departments and shows how IT Services can help add value to your projects.

MOSCAD (Motorola Supervisory Control and Data Acquisition)
MOSCAD is an extensive AFR Station alerting system. This system reduced delay from
90 seconds to 8 seconds, allowing for quicker Fire & Rescue response time for citizens. This alerting system includes features such as automatic operation of fire station doors, sounding alarms, and even ensuring that the oven is turned off after firefighters exit the building.

800 MHz Simulcast

Successful completion of $1M phase of project, resulting in better officer safety by enabling total radio coverage and seamless roaming throughout the City. Simulcast was a huge project because, among other things, the City had to extend the radio system to two other sites. Previously officers had to manually change their radio frequency depending on where they were at in the City in order to communicate with others. Now when a radio keys up– the transmission comes out of 3 mountaintop sites instead of just one ensuring that no matter where the users of the radio system are located they can communicate.

Aircard Deployment Complete

Using aircards instead of upgrading radio modems allowed the City to save approximately $3,500 per modem in APD patrol units . Aircards provide APD with faster communication in patrol units than even the newest radio modems. Aircards have cut the downloading of mug shots cut from 4 minutes to a few seconds.

HTE Assessment– Business Technology Improvement Project (BTIP)

BTIP facilitated all City departments in a comprehensive assessment of our current Information Systems and Business Technology, including recommendations to enhance our Information Systems and Business Technology. These efforts resulted in a budgetary allocation and a City-wide initiative to procure modern, business-rules based technology to support City operations and customer service.

New Fire Stations Online

ITS helped to build technology infrastructure for Asheville Fire & Rescue to meet their goals & objectives regarding their two new fire stations. This process included completing the network wiring, installation of security cameras and helping with the installation of the MOSCAD fire station alerting.

eCitation

Electronic Ticketing system that enables police officers in the field to enter ticketing information in one system that shares the information with City records, County records and the State AOC. ITS also configured printers for the patrol cars. The ability to produce an instant ticket provides a higher level of efficiency for our officers in the field.

Storage Area Network (SAN) Installation

Serving as the infrastructure for future work in Business Continuity and Disaster Recovery- a SAN is important for a number of reasons. Primarily it reduces the complexity, cost and downtime when a server fails or a new server is installed. A SAN storage unit is shared between servers that may have excess or unused space. The SAN is available to any server that may be running low on space and is able to use valuable space that exists on several different servers so that disc storage is not wasted. The City currently has two SAN units to safeguard our data and provide continuing operations in case of a natural disaster or failure of the primary SAN.

Project Highlights 2007

mapAsheville Accident Mapper
Accidents can be queried and reported on for further analysis to lead to remedial action. In the past, this was a manual process and took days of APD staff time; now, staff can easily pull traffic incidents from the past in minutes, and the community is better served.

mapAsheville- Development Mapper
A web based application developed in conjunction with the Office of Economic Development, Planning, and citizens. Citizens may use the Development Mapper to track development activity in neighborhoods. (**Winner** of the 2007 NC American Planning Association Marvin Collins **Outstanding Planning Award** for Innovations in Planning Services, Education, and Public Involvement)

Steep Slope Analysis & Calculator (BETA stage)
Worked with Buncombe County & UNCA as a response to slope ordinances. This tool is available to both Staff and Citizens to evaluate slope regulations. Currently in beta testing stages.

A vision for a better future.

IT Services will be considered a **credible and effective** business technology service organization by our customers. Our impact on the business we serve will earn the **respect** of our peers. We will be busy but not frantic, allowing for **planned and quality** work.

Strategic Goals

1. Ensure that technology services are aligned with business requirements of City Staff and citizens; follow on successes like mapAsheville to automate other City processes to save labor and improve efficiency.

2. Pursue organizational development strategy, including staff industry certifications and industry accreditation.

3. Significantly improve security and reliability by modernizing data center & data handling practices.

4. Utilize test environment and automated deployment system to ensure that quality, timely IT products are received by users & citizens.

5. Monitor and act on metrics regarding work load, capacity, and network health to enable proactive management of resources.

MapAsheville Framework

The chart to the right illustrates how an up-front investment in the mapAsheville framework had the very real result of shortening our subsequent development times. The mapAsheville program uses a customized application development framework, which utilizes a XML processor, to centrally manage numerous applications within one framework and provides for the reuse of code. Through the use of one framework and reuse of code, applications are developed in a more standardized and cost effective manner. This enables IT Services to help Departments in a more fiscally responsible and consistent approach.
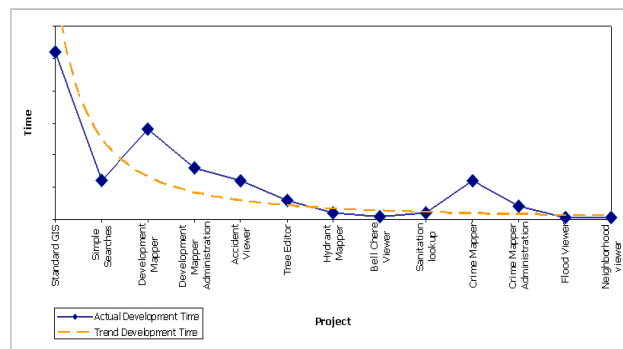
Fiber Optic Savings

Some creative thinking from our Technical Services Manager, Kevin Hymel, about a joint City-County project led IT Services to recommend that Buncombe County utilize a City contract to provision the new joint Public Safety Access point. The County received market quotes that would have cost anywhere from $450,000-$550,000, but through the City contract, taxpayers spent $170,000 instead.

City of Asheville Website

A new City website was launched successfully in 2007 reflecting the City and Council's commitment to invest in technology to make services better for citizens. IT Services and General Administration worked together to build a site that one citizen described as being "…Simple, elegant and easy to use. It contains a wealth of information that is well-organized." Administration and IT Services facilitated several web content training sessions for employees in order to enable departments to update their own content without having to go through IT Services. The diagram below shows how we have removed IT as the bottle neck in the web content process.

Old: Staff → IT → Web

New: Staff → Web
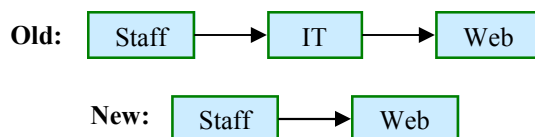
Development Services Metrics Project

At the request of the Development Services Center, Wanda Burgess developed a more streamlined system for capturing information during the development process. IT also delivered training to the five inter-linked departments involved in the permitting process. Citizens are now able to consistently view accurate information relating to their projects on e-gov.

## Knowledge Sharing & Staff Training

IT Employees facilitated several classes for City Staff this year. They include MapAsheville training, GIS 101, Web Content Management Training, RecTrac Training, and Maximo Training.

In order for the City of Asheville to operate in a dynamic technology environment, ITS employees must complete many hours of training yearly and even monthly. In the year 2007, IT Services employees completed an average of 50 hours per employee in training and professional development.

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Issues & Opportunities

In the last two quarters of 2007, IT Services started to measure what we call "human metrics" of downtime. "System metrics" – which are what IT departments typically measure -- tell us how we have impacted the **system.** Our new "human metrics" tell us how we have impacted the **customer.** We measure in **real time** between an incident and its closure. We feel that this is a better way to measure business impact, and we are excited about changing practices to influence these metrics positively, similar to what we have accomplished with overall customer service metrics.

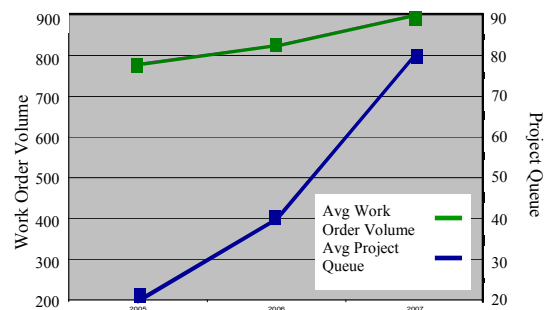### Customer <u>Impact</u> of Critical Outages for 3rd & 4th Quarter of 2007 Severity Analysis
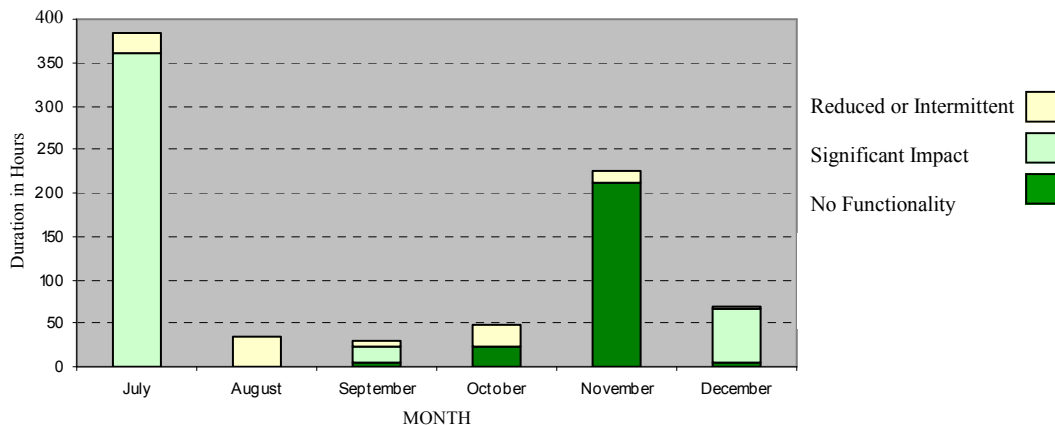
Projects, Projects, Projects...

The graphs to the right are a reflection of how City-wide Departmental projects are a reality for IT Services. The graph to the immediate right shows the number of projects in our queue has **doubled** in two years. Transactional work orders continue to experience steady growth. The increased number of projects has had a real effect on the ability to quickly complete everyday, non-project work orders.
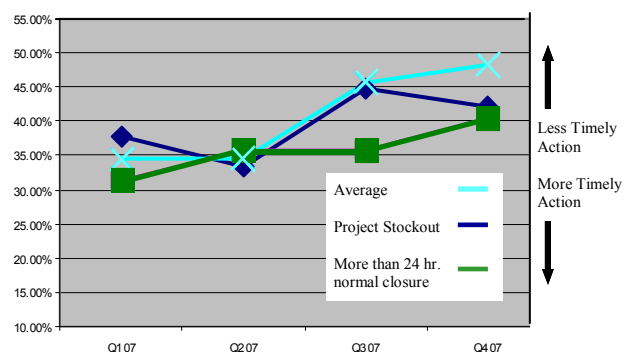(illustrated at bottom-right)
As you can see- IT Services- like all other Departments, is a very busy place.

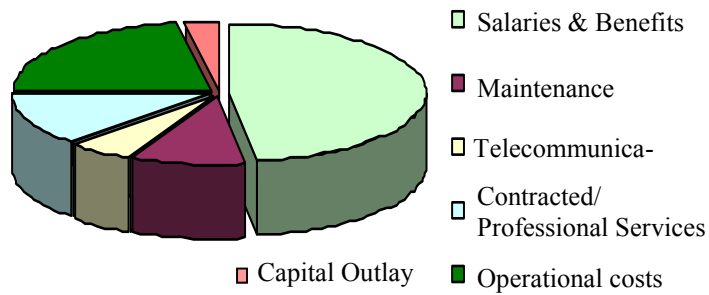Project Queue for IT Services, 2005– 2007
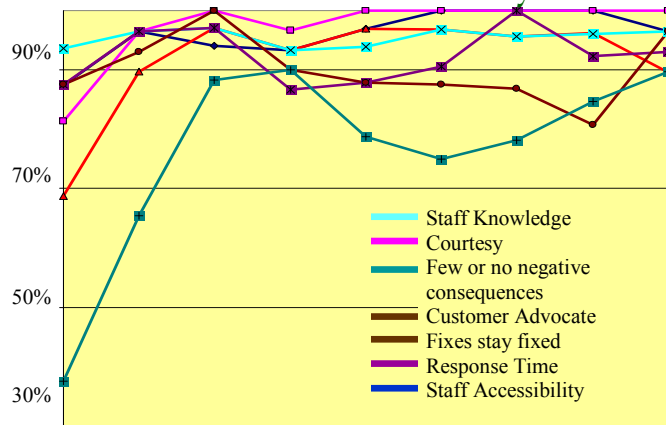

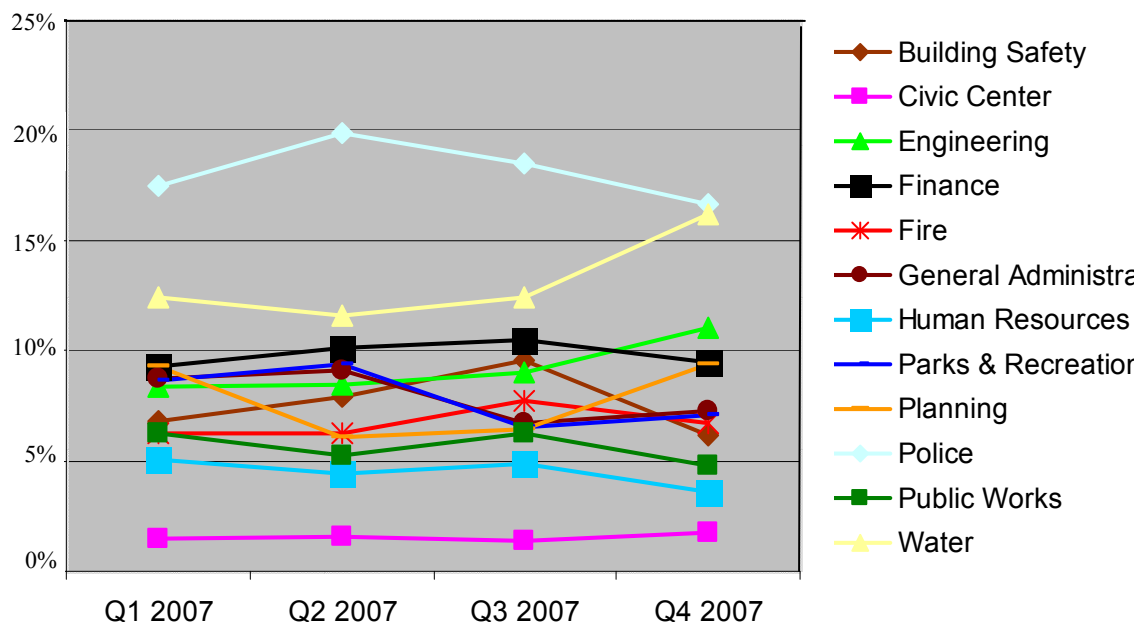CY 2007 Ability to Complete Work

FY 07-08 Expenditures by Type

- Salaries & Benefits
- Maintenance
- Telecommunica-
- Contracted/ Professional Services
- Capital Outlay
- Operational costs

Number of City Employees	1,500
Number of IT Employees	17
Administration	2
Support Services	5
Technical Services	6
GIS & Application Services	4
Average Work Orders Completed Monthly	972
ITS Budget as a percent of the City's Operating Funds	1.71%
Approximate number of printers managed	400
Network Servers managed	43
Number of cell phones, PDA's, and air cards Managed By ITS	648
Radios managed by ITS	1,000
Number of Cisco Phones	984
Average number of SPAM blocked weekly	72,000
Average number of emails checked for viruses weekly	325,000

Two Year Quarterly Trend- "Good or Excellent" Customer Service Survey

- Staff Knowledge
- Courtesy
- Few or no negative consequences
- Customer Advocate
- Fixes stay fixed
- Response Time
- Staff Accessibility

IT Services Utilization– Percentages of all work orders

- Building Safety
- Civic Center
- Engineering
- Finance
- Fire
- General Administra
- Human Resources
- Parks & Recreation
- Planning
- Police
- Public Works
- Water

About us 2007

Our new IT Support Manager, Tammi Hudson,

Tammi Hudson

has over 15 years of experience in the Information Technology field. She came to ITS from Indianapolis, Indiana where she spent the last six years as the Technology Program Manager for the new Indianapolis Airport. She has a special expertise in Public Safety Systems and Communications and has managed the design and construction of a new firehouse and a state of the art Airport Emergency Operations Center. Her responsibilities as the Support Manager include overseeing HelpDesk operations, Public Safety technology issues, and all customer facing processes for IT Services. Tammi is an avid motorcyclist, enjoys fishing, and Notre Dame Football. She lives on the family farm with her husband, Ernie where she cares for her five horses, two dogs, and a pair of twin barn cats.

Stephanie Osbourn is the most recent addition to the team. She was hired in

Stephanie Osbourn

December, 2007 to the GIS and Applications Services Division of ITS as a GIS Analysts. Stephanie comes to Asheville from Lincoln County, NC where she worked for the County Tax Department as a Senior GIS Analysts, creating and customizing maps. She earned a M.A. in Sport Management from the University of Connecticut and a B.S. in Business Administration from the University of Alabama. Her job responsibilities include developing a methodology for identifying and correcting the city's addressing errors. She is also responsible for the Bele Chere data, maps, and the infrastructure data. Outside of work Stephanie loves to walk, swim and bicycle as well as play classical guitar.

Promotions and such...

Wanda Burgess was recognized for her hard work and expertise with a promotion to Systems Analyst Senior, and has taken on a significant new role in business analysis in order to better steer business technology projects.

As a part of an IT Services reorganization to better address application support and innovation development, Jason Mann was recognized for his contributions in this area with a promotion to GIS and Application Services Manager. He now leads the GIS and Application Services division.

Certifications & Awards

Larry Bopp—Project + Certification
Debbie Messer— Help Desk Analysts Certification
Stacey Witkowski—Help Desk Analysts Certification
Ellane Chandler— Help Desk Analysts Certification

ITIL Certified! From Top Left: Steve Frey, Gilbert Domingo, Kevin Hymel,, Wanda Burgess, Brenda Moore, Kathy Wilson, & Jason Mann

ITIL Certification for staff members– Information Technology Infrastructure Library equips IT Services with expertise in IT best practices to better target citizen dollars for information technology investments. The City of Asheville was a regional host for the course. All IT Services employees achieved the certification with flying colors. They include **Wanda Burgess, Kathy Wilson, Gilbert Domingo, Brenda Moore, Steven Frey, Kevin Hymel, and Jason Mann**.

Excellence in Public Service Awards Two IT Services Employees received the Excellence in Public Service awards in 2007 at the City organizational level. **Debbie Messer** received the Outstanding Technician Award. **Wanda Burgess** was chosen for the Outstanding Professional award. **Congratulations and Thank You for your good work!**

COMMUNITY INVOLVEMENT

Volunteer Income Tax Assistance & Earned Income Tax Credit at Senior Opportunity Center For two years now, IT Staff has worked with the AARP's tax assistance volunteers to set up a processing center at the Senior Opportunity Center. This included setting up a firewall and router to enable the volunteers to use the City's network to provide free income tax service to low income individuals. During the tax season of 2007 the group processed over 800 tax returns. They are projected to process over 1,000 returns for the 2008 season.

Homeless Management Information System (HMIS)
IT Services partnered with Community Development (a division of our Planning department) to offer a mobile training lab for HMIS in the community. According to the Mountain Xpress, HMIS is designed as a computerized data collection tool to aggregate client-level information, over time, on characteristics, service needs and service utilization of individuals experiencing homelessness. This program can be used as a tool to better understand the needs of the homeless population and the response of the homeless service system to those needs.

The City of Asheville Youth Leadership Academy (CAYLA) is a new initiative designed to introduce Asheville's youth to the many careers available in public service, while simultaneously empowering them to take an active part in financing their post-secondary education. In partnership with the Asheville City Schools Foundation, the City has designated CAYLA as an integral part of the city's 'Grow Our Own' initiative. The City is committed to giving Asheville's young people the opportunity to stay and work in Asheville, as well as to have valuable work experiences that will advance their future careers wherever they go. Upon successful completion of the year-long program, each student is awarded $2,000 for a 529 College Savings Fund set up in their name.

About Tee: CAYLA participant Tee Harris spent the summer of 2007 with IT Services. Tee is a senior at Asheville High School, where she is an Honors student and resident fashionista. Tee helped us get several initiatives off the ground including among other things surplus updating and helping with the CALEA audit. She has been admitted to the University of North Carolina at Chapel Hill and has been named a finalist for the Dell Scholarship.

Tee Harris

~If you have further questions about the IT Services Annual Report please call 828-259-5510